

VoIP/TELECOM TEST

INSIDE WIRE TESTERS

GREENLEE SIDEKICK V.O.C.

The Sidekick V.O.C. is the test set to troubleshoot twisted pair applications. This lightweight, hand-held meter quickly and accurately uncovers intermittent troubles that other test sets can't detect.

- Identifies defective Inside Wire and jacks
- Measures resistance, AC/DC volts, quasi square wave, and pair balance
- Identifies shorts, opens, crosses and grounds
- Provides tone for twisted pair or crossed conductor identification
- Single set-up for testing Tip-Ring, Tip-Ground, and Ring-Ground with ground connection

P/N	Description
1143-5000	Sidekick V.O.C.

GREENLEE SIDEKICK® PLUS

The Sidekick® Plus Advanced Cable Maintenance Test Set is a multifunction test tool that will improve any technician's testing and troubleshooting capabilities on twisted pair. Building on a trusted design and patented technology, this lightweight, hand-held meter quickly and accurately uncovers intermittent troubles that other test sets can't detect. It uses digital technology to combine VOM and loop current tests, longitudinal balance (Stress Test), transmission and noise, open locator, load coil detection, RFL and a powerful TDR into one easy-to-use test set. Test functions can be selected and used individually, or run automatically by using the innovative Auto-test.

- Complete metering of voltage, current and resistance on copper cables
- Measurement of distance to opens
- Line quality tests for noise, loss, and power influence
- Multimode wire tracing tone
- Resistance fault locator (RFL) and calculator
- Powerful Time Domain Reflectometer (TDR)

P/N	Description
1155-5001	Sidekick® Plus Test Set

GREENLEE SIDEKICK T&N DELUXE TELECOM FIELD TESTER

The Sidekick T&N combines the functions of the Sidekick 7B plus the features of transmission and noise testing. The result is an even more versatile test set that identifies frequently missed faults as well as tests and qualifies the transmission quality of POTS lines. The additional features include:

- Five transmission and noise tests
- Determines the stressed noise susceptibility of dry and working pairs
- Measures resistance, AC/DC volts, and capacitive kick
- Provides tone for twisted pair or cross conductor identification
- Single setup for testing Tip-Ring, Tip-Ground, and Ring-Ground
- Minimal drying effect in all ranges

P/N	Description
1137-5002	Sidekick T&N



VoIP/TELECOM

how to

Quick Overview on How to Use the Tempo Sidekick V.O.C. on a New Install to Verify that there are no Inside Wiring Problems

1. Interview the customer on how his /her phones have been working.
2. Connect the red and black (ring and tip) connectors of the Sidekick to the pair of the inside wires to be tested. Connect the green connector to a ground source.
3. Do the AC test to confirm that there is no AC present tip to ring (T-R), ring to ground (R-G) and ring to ground (R-G).
4. Remove the ILEC/eMTA from the loop, perform a DC test to verify that there is no DC.
5. Move the green connector to another wire or another pair in the inside wire.
6. Rotate dial to Stress Test. Verify stress test reference ground. Final reading should be less than 20 dBnC.
7. Switch dial to Leakage Test and wait 15 seconds, reverse polarity, wait 15 more seconds, reverse polarity again and wait 15 more seconds. The needle should be near infinity. Do this for each of T-R, R-G and T-G.

From the time you begin with the AC test to completion should take less than 10 minutes.

Source: Compliments of Greenlee

INSIDE WIRE TESTERS

JDSU TESTIFIERPRO™ CABLE TESTER

The TestifierPRO™ Cable Tester provides telecom, datacom, and cable installers and technicians with cable test, length measurement, and hub blink functions in one unit. The easy-to-use TestifierPRO Cable Tester requires one-button operation to initiate Telco, network, and coax modes for diagnostic tests and results. The main unit includes built-in RJ11 and RJ45 jacks for testing six-wire and eight-wire twisted pair and F-connector for testing coax.

- Identifies cable termination on active ports by blinking port LED
- Measures cable length using patented cable capacitance method
- Displays single-ended test results in wiremap format for opens, shorts, and split pairs

P/N	Description
TP650	TestifierPRO Cable Tester with cable test remote. Includes 30.48 cm (1 ft) RJ45 to alligator clips cable (TP40), two 30.48 cm (1 ft) patch cables with RJ45 connectors (TP55), #1 coax cable test remote (TP65), and pouch. Requires 9-volt battery (not included)
TP655	TestifierPRO Cable Tester with 8 cable test remotes. Includes 30.48 cm (1 ft) RJ45 to alligator clips cable (TP40), two 30.48 cm (1 ft) patch cables with RJ45 connectors (TP55), 30.48 cm (1 ft) coax cable (TG30), #1 coax cable test remote (TP65), and pouch. Requires 9-volt battery (not included)



MEGGER MIT410-TC2 AND MIT430-TC2 INSULATION RESISTANCE AND CONTINUITY TESTERS

The Megger MIT410-TC2 and MIT430-TC2 insulation resistance and continuity testers have been designed specifically for use within the telecommunications industry. Unique telecommunications-related features include a soft canvas carrying bag with shoulder strap and rugged snap hook to attach to a tool belt, and a "bed of nails" test lead set.

The model MIT430-TC2 offers extensive results storage capability for later recall and Bluetooth download capability for wireless transfer of stored results to a PC.

The instruments allow the user to determine the condition of the insulation of the twisted copper cable pair, which could cause problems for services such as voice, video, and data or VoIP. When the insulation becomes weak or brittle, causing cracks or exposing copper within the cable, or water ingresses into the cable, the insulation resistance test will identify these situations immediately.

- Insulation testing up to 500V and 200GΩ
- Patented analog arc and dual digital display
- Cat IV 600V rating
- TRMS and DC Voltage measurement

P/N	Description
1001-368	Model MIT410-TC2
1001-369	Model MIT430-TC2, result storage, download capability



acronyms

ADMAdd/drop multiplexer (or multiplexing)	FTTxFiber-to-the-x, where x = (H)ome, (C)urb, (B)uilding, (N)ode, (P)remises, etc.	NIUNetwork interface unit	QoSQuality of service
APCAngled physical contact/angled polished connector	GPONGigabit-capable passive optical network	OCOptical carrier (transport rate)	RBOCRegional Bell operating company
ATMAsynchronous transfer mode protocol	HDTVHigh-definition television	OLAOptical line amplifier	RFRadio frequency
BERBit error rate (ITU-T uses bit error ratio)	HFCHybrid fiber coaxial transmissions	OLTOptical line terminal/termination	RFCRequest for comment (IETF)
BPONBroadband passive optical network	IECInternational electrotechnical commission	OLTSOptical loss test set	ROADMReconfigurable optical add/drop multiplexer
CDChromatic dispersion	IEEEInstitute of electrical and electronic engineers	ONTOptical network terminal/termination	RTDRound-trip delay
CMTCable modem termination system	ILECIncumbent local exchange carrier	ONUOptical network unit (non-transmitting ONT)	RxReceiver
COCentral office	IPInternet protocol	OPMOptical power meter	SDHSynchronous digital hierarchy
CWDMCoarse wavelength-division multiplexing	ITUInternational telecommunication union	ORLOptical return loss	SLAService level agreement
DBSDirect broadcast service	ITU-TInternational telecommunication union - telecommunications standardization sector	OSAOptical spectrum analyzer	SMSingle-mode
DFBDistributed-feedback (laser)	λWavelength	OSNROptical signal-to-noise ratio	SMFSingle-mode fiber
DWDMDense wavelength-division multiplexing	LFDLive fiber detector	OSPOutside plant	SNRSignal-to-noise ratio
EDFAErbium-doped fiber amplifier	MFDMode-field diameter	OTDROptical time-domain reflectometer	SONETSynchronous optical network
ENIUEthernet network interface unit	MMMultimode	p2mpPoint-to-multipoint	TDMTime-division multiplexing
EPONEthernet-ready passive optical network	MITRMean time to repair	p2pPoint-to-point	TDMATime-division multiple access
FDHFiber distribution hub	NFNoise figure (noise from an optical amplifier in dB)	PBXPrivate branch exchange	TIATelecommunications Industry Association
FECForward error correction		PCPolished connector	TxTransmitter
FOFiber-optic		PLCPlanar lightwave (or lightguide) circuit	UPCUltra-polished connector
FPFabry-Perot (laser)		PMDPolarization mode dispersion or physical medium dependent	VFLVisual fault locator
		PONPassive optical network	VODVideo-on-demand
		POTSPlain old telephone service	VoIPVoice-over-Internet protocol
		PSTNPublic switched telephone network	WDMWavelength-division multiplexing

Source: Compliments of EXFO

VoIP/TELECOM TEST

BUTT SETS

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FLUKE NETWORKS TS®19 TEST SET

The TS®19 test set combines all essential test set features in one set. This test set was specifically designed for in-house telecom technicians. Its high impedance monitor prevents accidental disruption of service from clipping onto a data line while in Monitor mode, thus ensuring the integrity of critical data lines. Features such as tone (DTMF) or pulse operation, talk/monitor capabilities, polarity test button and last number redial make this test set the perfect combination of features and price.

- High impedance DataSafe™ operation in monitor mode
- Tone (DTMF) and pulse operation
- Last number redial

P/N	Description
19800009	TS®19 test set with ABN
19800003	TS®19 test set with banana jacks to alligator clips



FLUKE NETWORKS TS®22 TEST SET SERIES

The TS®22 Test Set Series offers an unbeatable combination of reliability, durability and expanded utility. The unique built-in amplified speaker provides three audio levels for hands free listening and use with automated voice-response systems. The TS®22A offers a two-way speakerphone. Store up to nine, 18-digit telephone numbers in speed dial.

- TS®22 Test Set has an amplified speaker for hands-free monitoring
- TS®22A Test Set has a two-way speakerphone for true hands-free conversation
- DropSafe™ reliability passes 20 foot drop test
- RainSafe™ protection in severe weather conditions

P/N	Description
22800009	TS®22 test set with ABN
22800007	TS®22 test set with ground start cord
22800004	TS®22 test set with 346A plug
22800001	TS®22 test set with piercing pin clips
22801001	TS®22A test set with piercing pin clips
22801004	TS®22A test set with 346A plug
22801007	TS®22A test set with ground start cord
22801009	TS®22A test set with ABN



FLUKE NETWORKS TS®25D TEST SET

The TS®25D Test Set features data lockout and lockout override, making you completely safe in talk or monitor mode. Includes DSL/POTS filtering technology and a built-in analog tone generator. The Talk Battery function provides voltage to carry voice conversation on non-powered pairs. Also includes caller ID and call-waiting caller ID function. Large LCD makes the intuitive menus easy-to-read and use.

- Caller ID and Call Waiting Caller ID
- Amplified speakers for hands-free monitoring
- Data lockout and data lockout override
- Tone generator for wire identification

P/N	Description
25501109	TS®25D test set with ABN kit (includes pouch and earpiece)
25501009	TS®25D test set with ABN
25501004	TS®25D test set with 346A plug



FLUKE NETWORKS TS®30 TEST SET

The TS®30 Test Set features the latest in case design. The ergonomic non-slip grip handle provides improved handling of the set in all weather conditions. Includes DataSafe™ operation so technicians can clip onto a line in Monitor mode, without disrupting existing data traffic.

- High impedance DataSafe™ operation in Monitor mode
- DropSafe™ reliability passes 20 foot drop test
- RainSafe™ protection in severe weather conditions
- Mute switch

P/N	Description
30800009	TS®30 test set with ABN
30800001	TS®30 test set with piercing pin clips



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BUTT SETS

FLUKE NETWORKS TS®40 TEST SET SERIES

Fluke Networks TS®40 Series of test sets come with all the features you need to be more productive in the field, including a high-fidelity, two-way, hands-free amplified speakerphone for true hands-free conversation. Advanced testing functions for low and high voltage and low current detection are displayed in easy-to-read LEDs. Always-on Monitor Mode simplifies operation and speeds testing; just clip on to the pair and it is monitoring. The TS®40 Test Set incorporates DataSafe™ protection in Monitor Mode, enhanced with a superior high-impedance monitor to protect data lines. The TS®44 DLX Test Set includes data lockout and lockout override.

- DataSafe™ operation with Superior High Impedance Monitor
- Advanced testing functions for low/high voltage and low (mA) current
- Always-on Monitor Mode
- High fidelity, 2-way speakerphone for true hands-free conversations
- TS®44 includes data lockout, lockout override and DSL/POTS filtering

P/N	Description
50801001	TS®44PRO test set with piercing pin clips
50801004	TS®44PRO test set with 346A plug
50801009	TS®44PRO test set with ABN/PP clips
50801RJ9	TS®44PRO test set with ABN/PP and RJ11 plug
42801001	TS®42DLX test set with piercing pin clips
42801004	TS®42DLX test set with 346A plug
42801009	TS®42DLX test set with ABN

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FLUKE NETWORKS TS®52 TEST SET SERIES

Fluke Networks TS®52 PRO Caller-ID test set features the latest in test set technology. Designed with a superior LCD user interface, it allows you to see what cannot be heard in any outside plant environment. The back lit LCD and phosphorescent (glow-in-the-dark) keypad brings light to even the darkest of work environments, providing perfect line diagnostic clarity. Equipped with 2-way Speakerphone and DataSafe™ Pro data protection technology featuring superior high-impedance monitoring, Data Lockout and Lockout Override. Patent-pending filtering technology allows a technician to safely draw dial tone on a live DSL/POTS shared line to test the POTS service while protecting the DSL from downing or disruption.

- Display – back lit LCD and glow-in-the-dark keypad
- DataSafe™ with data indication – superior high-impedance monitoring, lockout and override, making you completely safe in any mode
- DropSafe™/RainSafe™ – passes 20-foot drop test and designed for use in rainy conditions
- DSL/POTS Filtering Technology – allows technicians to clip on a live DSL line to test POTS service without downing or disrupting data service
- 2-way hands-free speakerphone

P/N	Description
52801009	TS®52 PRO test set with angled-bed-of-nails, cord with piercing pin
52801004	TS®52 PRO test set with 346A plug
52801001	TS®52 PRO test set with piercing pin cord
52801RJ9	TS®52 PRO test set with angled-bed-of-nails, cord with piercing pin and RJ11 plug



GREENLEE TELE-MATE COMMUNICATIONS TEST SET

Designed for communications wiring installation and repair to quickly verify the quality of a new installation.

- Headset for hands-free operation
- Rugged design for demanding use
- Compact design and durable belt clip make it easy to carry
- Built-in ringer
- Tone/Pulse dialing
- Last number redial
- Line polarity indication

P/N	Description
PE810	Tele-Mate Communication Test Set

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VoIP/TELECOM TEST

BUTT SETS

GREENLEE TELE-MATE™ PRO TELEPHONE TEST SET

The Tele-Mate Pro Telephone Test Set will help you deal with the increasing complexity of telecom installation and maintenance.

- Complete telephone test set with ringer
- Phone to phone intercom
- Caller ID with name display
- Line voltage and current display
- High voltage detect and lockout
- High current detect and lockout
- Amplified loudspeaker line monitor
- Headset or hand set operation
- Tone and pulse dialing

P/N	Description
PE830	Tele-Mate™ Pro Telephone Test Set



GREENLEE TELEPHONE TEST SETS

Waterproof tested to an IEC IP67 rating, these test sets are so impervious to water they can actually withstand submersion.

The PE950 and PE961 feature our DigAlert over-voltage alarm and lock-out function to eliminate the danger of damaging or knocking out digital service lines.

The new PE961 provides full ADSL compatibility.

- Versatile dialing (tone and pulse, built-in ringer with adjustable ring tones, speed dial memory, and last number redial)
- Precise hook flash
- Microphone mute
- Easy-to-use talk and monitor keys
- Audible and visual mode indicators
- Polarity test in any mode
- Low battery indicator
- Drop tested to 20 feet
- Digital safe monitor
- Automatic ground-start operation
- Unique quick-release belt clip
- Premium cordset with bed-of-nails and piercing pin clips

P/N	Description
PE930	Test Set with Adjustable Ringer
PE940	Test Set with Amplified Speaker
PE945	Test Set with 2-Way Hands Free
PE950	Test Set with Amplified Speaker and DigAlert Lockout
PE960	Test Set with 2-Way Hands Free and DigAlert Lockout



GREENLEE BUTT SET

The PA1780 Butt Set is a telephone test set repair technicians use for line testing and temporary communications. Powered by phone lines, there is no need for an external power source. Butt Set provides DTMF and dial pulse output plus ring and monitor modes. The high impedance monitor mode doesn't interfere with data, conversation or signaling, while the LED identifies polarity. Telephone Test Set stores up to 10 frequently dialed numbers, Tangle-Free Cloth Cords (field replaceable), Angle Booted 66 Clips w/Bed-of-Nails (ABN) and Piercing Spike and 2.5 mm headset jack.

- Phone line powered eliminates need for external power source
- Provides DTMF (touch tone) and dial pulse output
- Talk, ring and monitor modes

P/N	Description
PA1780	Butt Set



VoIP/TELECOM TEST

WIRE MAPPERS

FLUKE NETWORKS MICROMAPPER™

The MicroMapper quickly and easily tests twisted pair cabling, giving you visibility of opens, shorts, crossed, reversed and split pairs. Just push the TEST button and MicroMapper will automatically scan all wire pairs for any existing faults in your cable.

MicroMapper's built-in tone generator works with the IntelliTone™ Pro Probe or any other analog probe, allowing you to trace cable through walls, floors, and ceilings.

The MicroMapper also includes a remote unit that allows one person to test installed cabling or patch cords.

- Gain new vision into verifying basic Ethernet cabling integrity quickly and easily
- Tests twisted-pair cables automatically for continuity and all major miswires
- Speeds troubleshooting with easy-to-read pair-based LED fault indicators
- Identifies hidden cables clearly with powerful inductive tone generator
- Enables one-person testing of installed cables with separate remote unit

P/N	Description
MT-8200-49A	MicroMapper and MicroMapper Remote, patch cable, 6-volt alkaline battery and user guide

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JDSU LANROAMERPRO™ CABLE TESTER

The LanRoamerPRO™ is a Length Measurement Tool, Cable Tester, and Tone Generator in one unit. The LCD, four momentary buttons, single end testing capability, and other features make the LanRoamerPRO an easy-to-use tool for residential, datacom, telecom, and cable contractors and installers.

- Measures cable length in feet or meters
- Two-line, 16-character alphanumeric LCD with icon flags displays test results in wiremap format
- Conducts single-ended tests on shorts, splits, and opens

P/N	Description
TP600	LanRoamerPRO Cable Tester with onboard cable test remote. Includes 30.48 cm (1 ft) RJ45 to alligator clips cable, two 30.48 cm (1 ft) patch cables with RJ45 connectors, wire configuration sticker, and nylon pouch. Requires 9-volt battery (not included)
TP607	LanRoamerPRO Cable Tester Kit with 8 cable test remotes. Includes 30.48 cm (1 ft) RJ45 to alligator clips cable, RJ45 to coax F-connector adapter, two 30.48 cm (1 ft) patch cables with RJ45 connectors, wire configuration sticker, and nylon pouch. Requires 9-volt battery (not included)

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GREENLEE LAN ProNAVIGATOR™ TESTER

Test data and telephone cable for proper pairing for EIA/TIA-568A & B, Token Ring, 10Base-T & common Cat 5, Cat 5e, Cat 6 configurations. Also tests continuity of 50 and 75 ohm coaxial cables with BNC terminations.

- Combination UTP/STP and coaxial cable tester for patch cords or installed cable runs
- Simple PASS/FAIL test results in one second - quickly move on the next test site
- Test status lights at both ends (main unit and remote)
- One-button, simple testing (PASS/FAIL or fault find) to detect: good connections, opens, crossed wires and split pairs
- Traces wires with tone and remote lights
- Quick fault analysis

P/N	Description
PA1543	LAN ProNavigator™ Tester

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training

TVC Sales and Product Management personnel will perform product training at customer or project site locations – wherever the need, at your convenience. In addition, TVC conducts WebEx/remote training on many of our products.

VoIP/TELECOM TEST

TDRs & FAULT FINDERS

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FLUKE NETWORKS TS®90 CABLE FAULT FINDER

The TS®90 is an easy-to-use three tools in one tester – a Fault Locator, a Cable Inventory Manager and a Toner with SmartTone™ technology. (Up to 2,500 feet). Easily find the distance to opens or shorts on electrical wire, telephone wire, security wire and coax. Displays distance reading rather than waveform.

- Works on any two or more conductor cable up to 2,500 feet (762 meters)
- Instantly measures distance to open or any fault from one end of any cable pair
- Patented SmartTone™ tone generator positively identifies pair
- Measures cable distance on spool
- Measures constantly while 'on'

P/N	Description
26500090	TS®90 Cable Fault Finder with BNC to alligator clips



FLUKE NETWORKS TS®100 CABLE FAULT FINDER

The TS®100 is our easy-to-use three tools in one tester—a Fault Locator, a Cable Inventory Manager and a Toner with SmartTone™ technology—up to 3,000 feet. Easily find the distance to opens or shorts on electrical wire, telephone wire, security wire and coax. Displays distance reading rather than waveform.

- Works on any two or more conductor cable up to 3,000 feet (915 meters)
- Instantly measures distance to open or any fault from one end of any cable pair
- Patented SmartTone™ tone generator positively identifies pair
- Measures cable distance on spool
- Measures constantly while 'On'

P/N	Description
2327747	TS®100 cable fault finder with BNC to alligator clips
2327932	TS®100 with BNC to banana to ABN
2327959	TS®100 metric cable fault finder with BNC to alligator clips
2327967	TS®100 line cord, BNC to alligator clip



FLUKE NETWORKS TS®100 PRO CABLE FAULT FINDER WITH POWERBT™ BRIDGE TAP

The new TS®100 PRO Cable Fault Finder with PowerBT™ Bridge Tap Detect not only provides open/short circuit detection—to 8,000 feet (2.4 kilometers)—but is also a telecom technician's first line of defense against bridge taps. Because bridge taps are a significant source of DSL network performance problems, they need to be identified and fixed quickly before causing customer attrition. The TS100 PRO can accurately locate multiple bridge taps in seconds on up to 3,200 feet (975 meters) of cable with the touch of a button.

- Bridge tap detection at the touch of a button.
- Reports distance to multiple bridge taps up to 3,200 feet (975 meters)
- Tests opens and shorts up to 8,000 feet (2.4 kilometers)
- Patented SmartTone™ for exact pair identification
- Built-in TDR and toner

P/N	Description
TS100-PRO-BT-TDR	TS®100 PRO Cable Fault Finder TDR Kit with Bridge Tap Detect



VERIFICATION TEST

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FLUKE NETWORKS MICROSCANNER² CABLE VERIFIER

The MicroScanner² streamlines voice/data/video cable and service testing. Revolutionary user interface displays available services (10/100/1000 Ethernet, POTS, PoE), cable length (with true TDR technology for finding distance to shorts and opens), wiremap, cable ID, and distance to fault all on one screen. Test RJ11, RJ45, and Coax with no adapters. Built-in IntelliTone digital and analog toning precisely locates virtually any cable or pair.

P/N	Description
MS2-100	MicroScanner² Cable Verifier. Includes MicroScanner² Cable Verifier with main wiremap adapter, multi-language Getting Started Guide, user CD, batteries, and Fluke Networks carry pouch
MS2-KIT	MicroScanner² Professional Kit. Includes MicroScanner² Cable Verifier with main wiremap adapter, remote identifiers #2-7, IntelliTone Pro 200 probe, shielded twisted-pair RJ45 patch cord, RJ11 patch cord, clip-set RJ45 to 8 alligator clip bare wire adapter, F Coax push on patch cord, accessory soft pouch, (2) AA alkaline batteries, (1) 9V alkaline battery, MicroScanner² Getting Started Guide, MicroScanner² Owners CD, IntelliTone Pro Getting Started Guide, IntelliTone Pro owners CD, packaged in a deluxe Fluke Networks carry case

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.



VoIP/TELECOM TEST

QUALIFICATION TEST

FLUKE NETWORKS CABLEIQ™ QUALIFICATION TESTER

CableIQ is the first qualification tool designed for network technicians who need to troubleshoot connectivity problems and qualify cabling bandwidth. It determines if your cabling is qualified to support 10/100, VoIP or Gigabit Ethernet.

- Troubleshoots why existing cabling plant can't support the desired network bandwidth
- Discovers what's at the end of any cable and displays device configuration (speed/duplex/pairing)

P/N	Description
CIQ-100	CableIQ Qualification Tester. Includes CableIQ with remote adapter, CableIQ Reporter software CD, (2) RJ45-RJ45 patch cord, USB cable, coax "F" push-on adapter, owners CD and quick start guide, (4) AA batteries, soft carry case
CIQ-KIT	CableIQ Advanced IT Kit. Includes CableIQ main unit with remote adapter, CableIQ Reporter software CD, IntelliTone 200 Digital Probe, Remote IDs #2-7, (2) RJ45-RJ45 patch cord, USB cable, coax "F" push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, RJ11-RJ11 patch cord, owners CD and quick start guide, (4) AA batteries, test accessory soft pouch, hard carry case

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.

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CABLE ANALYZERS

FLUKE NETWORKS DTX CABLEANALYZER™

The DTX CableAnalyzer™ Series from Fluke Networks is the testing platform for today—and tomorrow. This revolutionary platform significantly reduces total time to certify by improving every aspect of the testing process. It all starts with a 9-second Cat 6 Autotest that's several times faster than other testers—and fiber testing that's five times faster. DTX also gives you a complete solution for 10 Gig testing over copper, Basic Tier 1 fiber testing, and Extended Tier 2 fiber testing with the industry's only modular OTDR. The DTX makes you ready for whatever the world throws at you—today and tomorrow.

- Independently verified by ETL to meet ISO Level IV and TIA Level III Accuracy requirements
- Analyze test results and create professional test reports using LinkWare reporting software

P/N	Description
DTX-1800	CableAnalyzer. Includes DTX-1800 Main and Smart Remote, LinkWare PC Software, 128MB MMC Card, Cat 6A/Class EA Permanent Link Adapters (2), Cat 6/Class E Channel Adapters (2), Headsets for Talk (2), AC Chargers (2), Carrying Case, USB Interface Cable (Mini-B), Serial RS-232 Cable (DB9 to IEEE1394), User Manual

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.

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JDSU CERTIFIER40G: NEXT-GENERATION CABLE CERTIFIER

The revolutionary Touch2 design, with intuitive touch screen at both ends makes using the Certifier40G the easiest cable tester ever. The full screen at both ends allows users in the field to minimize their walking time by initiating, configuring, and storing tests from either side of a link or channel.

- Improve installer productivity up to 50 percent by eliminating unnecessary walking between local and remote units, with a Touch2 system that lets them view and analyze test results at both ends
- Protect your investment with the most advanced tester in the market that certifies beyond TIA-568/ISO 11801 standards, with a 1600 MHz measurement frequency

P/N	Description
NGC-4500-FA- X*	Certifier40G Class FA copper kit (class FA adapters not included) with NA power cord
NGC-4500-MM-X*	Certifier40G Class-FA copper and tier I fiber multimode kit (Class-FA adapters not included)
NGC-4500-MMSM-X*	Certifier40G Class-FA copper and tier I fiber multimode and single-mode kit (Class-FA adapters not included)
NGC-4500-6ACH2	Certifier40G Cat 6A channel adapter pair
NGC-4500-6ALKIT2	Certifier40G Cat 6A permanent link testing kit
NGC-4500-TERACH2	Certifier40G CLASS FA TERA channel adapter pair
NGC-4500-TERAL2	Certifier40G CLASS FA TERA permanent link adapter pair
NGC-4500-GGARJCH2	Certifier40G CLASS FA GG45/ARJ45 channel adapter pair
NGC-4500-GGARJL2	Certifier40G CLASS FA GG45/ARJ45 permanent link adapter pair

*(NA/EU/UK/AU) Please specify regional cables: North America (NA) Type A, European (EU) Type C, United Kingdom (UK) Type G, Australian (AU) Type I.

JDSU



LOOP TESTERS

EXFO AXS-200/610 30 MHz COPPER TEST SET

Identify copper problems affecting triple-play quality using the AXS-200/610—part of the SharpTESTER Access Line.

Applications

- Single-ended wideband frequency response and balance tests identify high-frequency, service-affecting faults
- Prequalification of subscriber loops for carrying ADSL2+ or VDSL2
- Spectrum qualification of circuits in any VDSL2 band plan (12, 17 and 30 MHz)
- Loop and fault analysis using proven TDR and FDR techniques

Key Features and Benefits

- Visual reports, graphs and histograms, displaying signal and noise issues
- 30 MHz spectrum analysis for VDSL2 and video prequalification and troubleshooting
- Automated clear, pass/fail results speeding up and simplifying test cycles

P/N	Description
AXS-610	30 MHz Copper Test Set

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.

EXFO AXS-200/650 IP TRIPLE-PLAY TEST SET

Offers a quick, yet thorough method for deploying triple-play services—IP-based data, VoIP and IPTV—facilitated by pass/fail-driven automated tests.

Applications

- Optimized for FTTH IP triple-play service commissioning and verification
- Internet connectivity assessment using ping, traceroute and HTTP/FTP speed testing

Key Features and Benefits

- Simple, affordable residential IP triple-play testing with pass/fail indication
- IPTV and VoIP service assurance using a comprehensive range of QoS metrics
- Feature-rich, but cost-effective: Ethernet 10/100 termination and Ethernet 10/100 pass through with triple-play QoS measurements

P/N	Description
TK-AXS-650	IP Triple-Play Test Set

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.

EXFO FTB-8105 TRANSPORT BLAZER DSX/PDH AND SONET/SDH ELECTRICAL TEST MODULE

Supports DSX, PDH, SONET and SDH electrical rates up to 155 Mbit/s. Ideally suited for TDM field service deployment and maintenance activities.

Applications

- DSX/PDH access network testing
- Ethernet-over-DSX/PDH network service turn-up

Key Features and Benefits

- Supports DSX, PDH, SONET and SDH electrical rates up to 155 Mbit/s in a single-slot module
- Dual Rx DSX
- Intuitive, feature-rich user interface with automated test scripting with multi-user remote management capabilities

P/N	Description
FTB-8105	DSX/PDH and Sonet/SDH Electrical Test Module

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.

EXFO MaxTESTER DSL

Fast, easy-to-use and cost-effective ADSL2+/VDSL2 and Ethernet test set for installing FTTx services over DSL.

Applications

- ADSL2+ and VDSL2 service verification—check the DSL service parameters from the central office to the customer premises
- Internet qualification—log into the ISP and ensure a working service
- In-home testing—prove operation and connectivity right up to the customer's equipment

Key Features and Benefits

- ADSL2+ testing, with optional VDSL2 for hybrid networks
- Ethernet testing for qualifying FTTx service at the customer premises
- IPTV test suite for automated quality of service (QoS) testing
- Data testing and Web browser for complete service qualification

P/N	Description
MAX-630	MaxTester DSL

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.



LOOP TESTERS

EXFO FTB-810 NetBlazer SERIES TRANSPORT TESTER

Offers comprehensive, yet simple test suites for field technicians to easily turn up, validate and troubleshoot transport circuits covering all DSn/PDH and SONET/SDH interfaces up to 10 Gbit/s.

Applications

- DSn/PDH
- SONET/SDH

Key Features and Benefits

- Complete test suite for DSn/PDH and SONET/SDH interfaces up to 10 Gbit/s
- Simplified BER testing with pass/fail indicators based on user-defined thresholds
- Unprecedented configuration simplicity with hybrid touchscreen/keypad navigation and data entry
- No data interpretation errors with revolutionary new GUI on 7-inch TFT screen, historical event logger, visual gauges and 3D-icon depictions of pass/fail outcomes
- Simpler reporting with integrated Wi-Fi and Bluetooth connectivity capabilities
- Centralized support for injection/monitoring of errors and alarms, trace messaging, overhead monitoring/manipulation and performance monitoring statistics
- Extended field autonomy with compact, lightweight platform equipped with a long-duration battery pack



P/N	Description
FTB-810	DSn/PDH and SONET/SDH Up to 2.5 Gbit/s NetBlazer Series Transport Tester
FTB-810G	DSn/PDH and SONET/SDH Up to 10 Gbit/s NetBlazer Series Transport Tester

Multiple configurations available. Please check with your TVC representative or www.tvcinc.com for details.

FLUKE NETWORKS 990DSL COPPERPRO™ TEST SET

The CopperPro offers a broad range of Plain Old Telephone Services (POTS) troubleshooting, fault location and line qualification capabilities. Its Wideband/TDR option adds high frequency transmission testing and qualification functions for services like ADSL, HDSL and HDSL2, ISDN, T1, E1 and DDS.

- Replaces up to twelve traditional test sets
- Troubleshoots and qualifies lines for POTS, ADSL and other special services
- Time Domain Reflectometer (TDR) feature allows precision fault location

P/N	Description
990DSLWT	CopperPro Loop Tester with Wideband and TDR
9900DSL	CopperPro Tester with Basic POTS features

FLUKE
networks



FLUKE NETWORKS COPPERPRO™ SERIES II BROADBAND LOOP TESTER

CopperPro Series II is the latest generation of the leading copper loop test and analysis test sets. It provides a complete range of troubleshooting, fault locating, testing and qualification capabilities, all in a rugged, handheld easy-to-use DSL test set. New features include broadband noise identification for VDSL, advanced TDR capabilities for locating short bridge taps and other VDSL affecting impairments, and an optional VDSL modem for verifying service connectivity and performance.

- Quickly qualify the facilities for DSL services including ADSL, VDSL, HDSL, T1, and other special services
- Easily identify and locate possible problems to ensure reliable performance
- Install new services efficiently with fewer call-backs

P/N	Description
990DSL2+	CopperPro Next Gen Copper Loop Analyzer w/TDR and wideband spectral analysis for ADSL2+
990VDSL	CopperPro Next Gen Copper Loop Analyzer w/TDR and wideband spectral analysis for VDSL



FLUKE NETWORKS 635 QUICKBERT-T1

Compact, handheld T1 Test Set for construction, installation and troubleshooting applications. Perfect for cell backhaul applications.

- Instantaneous detection and display of framing, line coding, errors, alarms, level, frequency and more
- Transmits and receives common Bit Error Rate Test (BERT) patterns and includes all common loop codes
- Compact, rugged and easy to use

P/N	Description
635	QuickBERT-T1, carrying case, ToolPak™, and necessary cables and adapters

